Iowa Department of Natural Resources/ Keep Iowa Beautiful

Iowa Illegal Dumping Pilot Project Final Report

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Executive Summary

Illegal dumping is a continual challenge for Iowa. Across the state, communities and rural areas have chronic illegal dumping sites, where everything from refrigerators to tires is discarded. Most commonly, these items are dumped along roadsides, ditches and fields, wooded areas and remote sites.

Besides costing Iowa taxpayers millions of dollars each year for cleanup, illegal dumping also poses a threat to both the environment and public health and safety. Objects dumped along roadways can be hazardous to travel. Hazardous waste streams can seep into the ground and eventually into water sources. Dumping sites can become breeding grounds for insects and rodents. And, they diminish the beauty and quality of life near these areas.

The penalty for illegal dumping in Iowa is up to \$5,000/day, however, illegal dumpers are rarely caught and prosecuted. The Iowa Department of Natural Resources (DNR) and local authorities investigate dozens of illegal dumping complaints each year and provide enforcement where possible. Many people who illegally dump know it is illegal, but are indifferent to the problem. Others who illegally dump may not be aware of where to take their items for disposal or don't consider the costs associated with cleaning up their illegally dumped trash.

In 2004, the DNR partnered with Keep Iowa Beautiful (KIB) to create a pilot program for combating illegal dumping in the state. Keep Iowa Beautiful is a privately funded charitable organization of Iowa citizens who are working for a more beautiful, litter-free Iowa. It is an affiliate of Keep America Beautiful. KIB selected Strategic America (SA), a Des Moines marketing firm, to assist with program strategies and campaign materials development.

Under a competitive process, the pilot program was implemented in three Iowa communities of differing sizes and geography with the intention of testing message and communication vehicles' effectiveness and that best practices learned could eventually be shared and used by all Iowa communities. The ultimate goal is to reduce and prevent illegal dumping in Iowa.

Program Planning

The pilot program began with the creation of an oversight board, called the Illegal Dumping Prevention Coordinating Council, chaired by the DNR. The board included representatives from a variety of organizations with insight into illegal dumping, such as the Iowa League of Cities, the Iowa Farm Bureau, the Iowa Department of Transportation, etc. (a complete list of council members is included later in this report). The group's purpose was to counsel DNR/KIB as they developed an illegal dumping model program tailored to each community.

Through a written application process, DNR/KIB selected the pilot communities based on three factors: community size, urgency/severity of illegal dumping in the area and demonstrated community commitment. The selected communities – Linn County, Boone County and Appanoose County – each formed a task force to lead and manage their programs. DNR, KIB and SA representatives met several times with each task force to guide and assist in their individual planning process.

Research

Early in the planning process SA conducted several types of research to determine pilot community residents' awareness and attitudes about illegal dumping and to provide a baseline for future results measurement. SA conducted secondary research to learn about illegal dumping programs and best practices in other states and communities and how success was measured. Next, SA conducted focus groups in each pilot community with residents and relevant business

representatives to learn about why illegal dumping happens and solutions to the problem. Finally, SA conducted a pre- and post-survey in each community to formally measure awareness and attitudes among residents.

Campaign Development

Because it's difficult to catch and prosecute illegal dumpers, the crime usually goes unpunished. Task force members and research participants said they believe that people who illegally dump know they probably won't get caught, so they continue doing it.

In the pre-survey, respondents indicated that messages stressing that illegal dumping is wrong, harms the environment and adversely affects the quality of life in the surrounding area would not be effective in a public campaign to discourage dumping. Instead, they suggested that increasing enforcement of illegal dumping laws and publicizing convictions for illegal dumping would work best. These opinions were also reflected by focus group participants.

As a result of the research, DNR/KIB, along with the pilot community task forces, decided to develop a campaign that would assist law enforcement agencies increase illegal dumping arrests and convictions. Its main purpose was to encourage residents to report illegal dumping, so SA created a branded campaign with the tagline "Take a Stand for Your Land." The message was intended to make residents feel empowered and motivated to report illegal dumping. Print pieces, including newspaper ads, posters and brochures, featured color photos of illegal dump sites in Iowa with signs reminding readers of the negative consequences of illegal dumping. For instance the signs read "Don't worry, it will go away on its own in about 50,000 years" or "One man's trash is another man's trash." Each piece included the Take a Stand for Your Land tagline along with a phone number and call to action urging readers to report illegal dumping.

Campaign materials were developed in conjunction with each community's individual program plan. Briefly, those plans included:

Linn County:

- Illegal dumping tracking/monitoring database development
- Demonstration clean-up and news conference
- Good business partners program
- Reporting hotline
- Illegal dumping "bookmark" flyer with hotline
- Hotline business cards
- Hotline windshield decals
- Radio ads

Boone County:

- Waste disposal and recycling guides
- Newspaper ads
- Radio ads
- Reporting hotline
- Bumper stickers
- Portable display
- Billboards

Appanoose County:

- Posters
- Adopt-a-Site program
- Litter bags
- Educational brochure
- Newspaper insert
- Newspaper columns
- Radio ads
- Clean-up/equipment and site signage

Pilot Program Results

Because measuring results was a specific focus of this pilot program, communities were urged to find solid ways to measure the success of their programs. Those measurements, along with survey results, were intended to help DNR and KIB determine best practices for future illegal dumping programs.

Survey Results

Overall, three out of every ten respondents (30%) reported seeing or hearing information about illegal dumping in the past year. About ten percent indicated they had seen or heard the slogan "Take a Stand for Your Land" or a telephone number for reporting illegal dumping in their area in the past year. Those reporting they had heard or seen information about illegal dumping reported significantly higher levels of knowledge and awareness. Boone and Appanoose County respondents reported higher rates for these questions than Linn County, not surprising considering the vast difference in population.

Survey respondents indicated the top three sources through which they had heard or seen an illegal dumping message in the last year were newspaper, television and radio. Though none of the counties used TV ads in their programs, they did receive coverage on several news programs, which may indicate why TV was regularly listed as a top source of information. Overall, these results indicate radio and newspaper were the most valuable communication vehicles in this campaign.

Among respondents there were high levels of knowledge associated with knowing it is illegal to dump items outside designated areas (98%) and knowing how to properly dispose of items (82%). In the post-survey, respondents showed a slight increase in knowing how to report an illegal dumping incident and knowing the penalties for illegal dumping.

There was overwhelming agreement among respondents in both the pre- and post-survey that illegal dumping negatively affects communities and the environment. Actions identified as having a consequence for illegal dumpers were consistently identified as the most effective, such as increasing the enforcement of illegal dumping laws, publicizing convictions for illegal dumping and increasing fines and penalties for illegal dumping. "Soft" actions, such as telling people that not illegal dumping "is the right thing to do" were considered to have little impact.

Pilot Community Results

Boone:

In Boone County in 2005, the number of appliances collected from dump sites was significantly lower than in previous years. Boone did not report any additional hard measurement numbers, but noted that the creation of an illegal dumping task force was one of the most important achievements of the program. For the first time, the task force brought together the appropriate parties to discuss the issue and develop strategies to tackle the problem. Boone indicated that future efforts may be more specifically targeted at local governments and non-government organizations in order to make increased impact through local ordinances, etc.

Linn

Linn County created a hotline reporting number that was included in all creative materials. The group also created an in-depth tracking/monitoring database shared by all participating agencies (Cedar Rapids/Linn County Solid Waste Agency, Secondary Road Dept., Public Health Dept., Sheriff's Department, etc.) for more efficient response to illegal dumping complaints. The following is a summary of results from the hotline and database:

- Hotline received 249 calls from April 1 to December 31, 2005 (66 repeat calls);
- Average cost per hotline call was approximately \$3.61;
- 375 illegal dumping reports were entered into the database;
- 29 reports are considered "active" and 346 are complete (cleaned up); and
- \$16,598.54 in remediation costs and 187.55 hours have been documented to date.

On the public education front, three area businesses (MediaCom, Alliant Energy and Linn County Cooperative) participated in the group's Good Business Program, created as part of the illegal dumping pilot project. The program included distribution of flyers and window decals and inperson presentations by members of Linn County's task force.

Post-survey results indicate an increased awareness of illegal dumping issues in Linn County. One in four residents reported knowing how to report illegal dumping and one in five said they took action if they saw a dump site. Approximately 20 percent of respondents said they heard or saw illegal dumping information during the pilot project.

Appanoose

In fiscal year 2004, the Appanoose County Health Office investigated 32 complaints of illegal dumping with only one prosecution and conviction. During the pilot program 62 reports were investigated, resulting in ten convictions. In one instance, a deputy volunteered to climb a tree to retrieve debris at a dump site; the material he obtained led to a conviction.

Sites that have been cleaned and have signs posted are staying clean. During the program 134 sites were cleaned up.

Previously, dump sites were cleaned on a priority basis as funds and workloads allowed. First priority had been dump sites that jeopardized the safety of the traveling public and posed major environmental concerns. All other dump sites were cleaned as funds and workloads allowed. In fiscal year 04, Appanoose County spent \$9,883.06 on the cleanup of illegal dump sites. During that year, 326 man hours and 78 equipment hours were used. During the pilot program Appanoose County Secondary Roads focused on problematic sites that weren't previously a priority. During the pilot program, Appanoose County spent \$17,349.32 on the cleanup of illegal dump sites. In that time, 843 man hours and 141 equipment hours were used.

In the past, reporting was taking place in several locations. To consolidate and better track illegal dumping reports the Sheriff's database was enhanced to allow input from all county and public entities reporting dump sites. The Appanoose County Health Office has received fewer illegal dumping reports since establishing and advertising a reporting number.

Conclusion

The pilot program provided DNR/KIB with valuable information about fighting illegal dumping in Iowa. One of the most significant factors learned is the importance of community agencies working together to track and monitor illegal dumping, best achieved through an online database. Creating a collaborative tracking system helps organizations better understand the scope of the problem and handle dump site reporting and cleanup more quickly and efficiently.

Also, KIB/DNR learned that to effectively fight the problem, illegal dumpers must believe there are consequences for their actions. Reporting, enforcement and publicized convictions are all vital to demonstrate that illegal dumping is a crime that won't be tolerated.

DNR/KIB's suggestions for moving forward with illegal dumping prevention activities are listed on page ____ of this report.

Contract Summary

The Iowa Department of Natural Resources contracted with Keep Iowa Beautiful for the illegal dumping prevention pilot project. According to the contract, the DNR's objective was to obtain services for the development and pilot implementation of a statewide campaign to prevent illegal dumping in a minimum of three communities of differing population and geographic location. Also, the contract required the development and tracking of measures for evaluating the effectiveness of public awareness materials and pilot community implementation.

Keep Iowa Beautiful sub-contracted with Strategic America, a Des Moines-based integrated marketing agency, to provide marketing support including strategic counsel, creative design, public relations, program coordination and more.

A copy of DNR's contract with KIB is included at the end of this report, along with a letter of agreement between KIB and Strategic America.

Illegal Dumping Prevention Coordinating Council

The Illegal Dumping Prevention Coordinating Council was created to provide insight and expertise for DNR/KIB by representatives with knowledge and ideas for implementing a successful program. Potential council members received a letter of invitation to serve from KIB. Member responsibilities included:

- Sharing experience and knowledge of the illegal dumping problem in Iowa;
- Reviewing and providing input for pilot community selection;
- Research insight, suggestions and discussion;
- Budget allocation decisions for the pilot communities;
- Creative campaign feedback; and
- Suggestions for statewide or regional campaign rollout.

The Council met approximately twice each year at the Metro Waste building in Des Moines. Members served on a voluntary basis without payment or expenses.

Council members included:

- Tom Anderson, Iowa Department of Natural Resources
- Gerry Schnepf, Keep Iowa Beautiful
- Sara Bixby, South Central Iowa Solid Waste Agency (representing ISOSWO)
- David Putz, Iowa Department of Transportation
- **Don Dierks,** Council Bluffs Dept. of Public Health (representing IEHA)
- Marlyn McKeen, Goodwill Industries of Central Iowa
- Konni Cawiezell, Iowa League of Cities
- **Steve Camp,** Pocahontas County Engineer (representing Iowa State Association of Counties and County Engineers)
- Rick Robinson, Iowa Farm Bureau Federation
- **Brent Long,** Polk County Sheriff's Office (representing Iowa State Sheriffs' and Deputies' Association)
- Mark Jones, Cedar Rapids Solid Waste Recycling (representing the Iowa Chapter of American Public Works Association)

Community Selection Process

The program pilot communities were selected based on three factors: community size, urgency/severity of illegal dumping in the area and demonstrated community commitment.

Community Size

DNR/KIB wanted to explore how community size and rural/urban characteristics impacted program approaches and their effectiveness. DNR/KIB selected one pilot community from each of three categories to ensure diverse community size:

- Small fewer than 25,000 population
- Medium 25,000 to 100,000 population
- Large -100,000 + population

Problem Severity

In their program applications, communities were asked to describe the extent of the illegal dumping problem in their areas. DNR/KIB agreed that ideal pilot communities must demonstrate a significant problem to ensure ample opportunities to implement a measurable prevention program.

Community Commitment

The final factor in the selection process was demonstrated community commitment. Applications were reviewed for number and type of community organizations/agencies to be involved (i.e. sheriff's office, city council, public health department, etc.) as well as the number of in-kind hours communities expected participating organizations to allocate to the program.

The Selection Process

KIB sent a program application and letter of invitation signed by DNR Director Jeff Vonk and KIB Executive Director Gerry Schnepf to:

- Iowa City Managers/Mayors
- Iowa County Supervisors/County Engineers
- Iowa Society of Solid Waste Operations (ISOSWO) Members
- Iowa Regional Councils of Government
- Iowa Chamber of Commerce Executives

The invitation letter described the selection process and criteria. It included information about the services communities would receive including research, planning and marketing assistance.

DNR/KIB staff reviewed all applications submitted and made selection recommendations to the Illegal Dumping Prevention Coordinating Council. Council members agreed with the initial recommendations. Selected communities – Linn, Boone and Appanoose – were then notified in writing. Representatives from each community signed a detailed letter of agreement to confirm participation in the pilot program.

Illegal Dumping Research Summary

KIB/DNR utilized surveys, focus groups and secondary/online research to better understand Iowa's illegal dumping problem, create a baseline measurement for pilot county residents' illegal dumping knowledge, attitudes and behavior and evaluate campaign effectiveness.

Pre-Survey

DNR/KIB created a printed survey instrument to determine pilot county residents' knowledge, opinions and behaviors regarding illegal dumping. The survey, including a cover letter from each county's task force, was mailed in June 2004 to 2,000 random households in each county, for a total mailing of 6,000. A total of 707 (11.8%) were returned.

Specific topics centered on five areas: knowledge and awareness, attitudes regarding illegal dumping, potential impact of actions to discourage illegal dumping, behaviors and action, and identification of sources used to get information. The information collected was intended to assist with the creation and implementation of programs and materials to combat illegal dumping in these three counties.

Key findings:

Awareness

- There are generally high levels of knowledge associated with knowing it is illegal to dump junk outside designated areas (98%); knowing how to properly disposal of furniture, tires and appliances (83%); and knowing how to tell if something has been dumped illegally (70%).
- Only one third (34%) know how to report an illegal dumping incident and only one fifth (20%) know the penalties for illegal dumping. One fifth (20%) of those having seen an illegal dumping site or person illegally dumping in the past year did anything about it.
- Those with the knowledge of how to report illegal dumping were four times as likely to do something about it.
- People were twice as likely to do something about illegal dumping if they saw a person as opposed to finding a site.
- Men tended to report a higher level of knowledge and awareness of illegal dumping.
- Those living outside city limits tended to report a higher level of knowledge, awareness and action in regard to illegal dumping.

Attitudes Regarding Illegal Dumping

- There is overwhelming agreement that illegal dumping negatively affects the
 environment, has a negative economic effect on a community, has a negative
 effect on public health and safety, and negatively affects the appearance of a
 community.
- People living outside city limits see illegal dumping as a bigger problem in their community.
- Women have stronger negative views towards illegal dumping than men.

Potential Impact

- Actions identified as having a consequence for illegal dumpers are believed to have the most effect on discouraging illegal dumping. These include increasing the enforcement of illegal duping laws, increasing fines and penalties for illegal dumping, and publicizing convictions for illegal dumping.
- Actions believed to have the least impact on discouraging illegal dumping included telling people that not dumping is the right thing to do, and presenting a message emphasizing community pride.
- Ratings of impact tend to increase as age increases, with the exception of providing rewards where impact decreases as age increases.
- Females tend to rate the 'softer' actions as having more impact.
- Impact ratings tend to decrease as income level increases among the 'softer' actions.

Behavior/Action

- A clear majority of respondents are likely to report an illegal dumping site (74%) or a person dumping illegally (80%). There is near unanimous support of efforts to reduce illegal dumping (98%).
- Likeliness and support tend to increase as income level increases.

Post-Survey

To ensure consistency, the post survey instrument asked exactly the same questions as the presurvey, except for one area. Rather than asking about effectiveness of key messages, DNR/KIB inserted a new section asking recipients if, in the last year, they'd seen or heard information about illegal dumping or, more specifically, the "Take a Stand For Your Land" campaign slogan. The survey also asked if respondents had heard a telephone number for reporting illegal dumping or if they'd seen or heard something about illegal dumping in the past year.

Key findings:

Awareness

- Awareness levels were very similar to pre-survey results.
- Those with the knowledge of how to report illegal dumping were five times as likely to do something about it.
- People were twice as likely to do something about illegal dumping if they saw a person illegally dumping as opposed to finding an illegal dumping site.

Attitudes Regarding Illegal Dumping

- Attitude findings were very similar to pre-survey results.
- Females have stronger negative views towards illegal dumping than males.

Potential Impact

- Results were similar to pre-survey.
- Ratings of impact tended to be lower in Appanoose County.
- Females rate actions as having more impact than males.
- Ratings of impact tend to increase for 'softer actions' as age increases.
- Impact ratings tend to decrease as income level increases among the 'softer' actions.

Behavior/Action

• Results were similar to pre-survey

Information Sources

- Overall, three out of every ten respondents (31%) reported seeing or hearing information about illegal dumping. Traditional media sources (newspaper, television, and radio) were reported most often as the means by which the information was seen or heard.
- Those reporting they had heard or seen information about illegal dumping reported significantly higher levels of knowledge and awareness.
- Those reporting lower levels of annual income reported higher rates of seeing/hearing illegal dumping information.

Focus Groups

Three focus groups and one individual interview were conducted to help develop strategies to support the pilot program. Specifically, the goals were to:

- Explore business and community awareness of and concerns over illegal dumping;
- Gather insight regarding messages and approach as public education campaigns were considered;
- Identify particular local obstacles and opportunities relevant to any illegal dumping prevention initiative.

Focus groups are a form of qualitative research. They are conducted to better understand the experiences of the respondents and to allow participants to express their thoughts and feelings on a given issue.

The following groups, moderated by Pat Boddy of Boddy Media Group, were conducted:

| Appanoose County | June 1, 2004 | 6 Men, 0 Women | Community Group |
|---------------------|----------------------|-----------------------------|--------------------------|
| Boone County | July 8, 2004 | 5 Men, 1 Woman | Business Group |
| Boone County | July 8, 2004 | 4 Men, 5 Women | Community Group |
| On July 9, 2004, in | Johnson County a one | -on-one interview was condu | icted with a male busine |

On July 9, 2004, in Johnson County, a one-on-one interview was conducted with a male business representative. (This was originally recruited as a business focus group, but due to no-shows, an interview was conducted).

Key findings:

Reasons Dumping Occurs (according to participants):

- Little convenience, high costs and few consequences lead to illegal dumping
- When first asked the causes of illegal dumping, respondents claim "landfill fees."
 Yet when asked if lowered fees would solve the problem, the answer is a resounding "no."
- Respondents generally see illegal dumping as a matter of convenience. If it were convenient and reasonably affordable to legally dump their goods, respondents say many more would go the legal route. But illegal dumpers currently suffer no real consequences, so "don't bother" with the effort and fees required to dump legally.
- Increased law enforcement puts "teeth" behind the issue. People need to see reaction from law enforcement.
- Do-it-yourselfers and renters moving from homes are blamed for much illegal dumping.

- Some people "don't know any better." They don't know how to get rid of hazardous materials or where they can take larger items, so they dump.
- Some people are just plain hostile and use illegal dumping as their form of vandalism. These dumpers, they say, will only be stopped with conviction.

<u>Problem Solutions (suggested by participants)</u>

- Provide convenient access to legal dumping. Increase landfill service hours. Educate citizens on landfill location, hours, etc.
- Lower landfill costs and offer some limited dates/times/hours for no-cost dumping. This might not be as convenient as in-town trucks or dumpsters, but for those folks who were going to haul their junk to some rural roadside anyway or for those who are willing to provide some cleanup after somebody else's mess t the free access could make a difference.
- Improve and increase enforcement/punishment options including big fines (that are actually collected, community service and public humiliation.
- Reporting is key to stopping illegal dumping. Create an easy-to-use reporting hotline, but remember, without convictions, reporters will eventually not bother.

Initial efforts to identify and contact convicted illegal dumpers were not successful. KIB contacted several law enforcement agencies/officers to obtain names to make contacts and/or schedule interviews. These efforts were met with resistance, making it difficult to discern the real profile of an illegal dumper.

Online and Print Research

The online and print research summary reviewed national and state studies on illegal dumping and littering, including best practices from communities and states around the nation that are aggressively pursuing the problem. The best practices were reviewed for possible applications to the Iowa pilot program.

Key findings:

- According to the U.S. Environmental Protection Agency (EPA) illegal dumping is
 primarily non-hazardous waste that's dumped to avoid landfill fees, out of laziness or
 disrespect for other people's property and the environment. The bulk of the waste
 includes construction and demolition waste; abandoned cars, auto parts and old tires;
 appliances and furniture; and yard waste.
- Typical urban and rural locations for illegal dumping include abandoned industrial, residential or commercial buildings, vacant lots, and infrequently used alleys or roadways that are poorly lit. Most illegal dumping takes place at night or in the early morning during the summer months. In urban settings, many times lower income areas are plagued by illegal dumping. In addition, many businesses such as charity drop box locations, construction sites or public areas with waste containers are prime locations for illegal dumping. The borders of cities and counties tend to have a higher incidence of illegal dumping.
- The National Center for Environmental Decision-Making Research recently highlighted a study by the state of Illinois that noted a "collective failure by government, industry, and the public to develop and accomplish effective litter control." Therefore, the study stressed a need to educate the public and provide for strict enforcement of littering (and dumping). The study provided an enforcement checklist for law enforcement.
- Most illegal dumping prevention programs did not include measurable results reporting.
- Web sites and news articles were reviewed for ideas regarding campaign messages, activities, etc.

Pilot Community Strategies & Results

Each of the three pilot communities worked independently to develop a plan best suited for their unique needs. Working with DNR, KIB and SA the groups set measurable objectives and determined priority activities for their 2005 programs. As they planned, the communities indicated that their efforts would continue beyond 2005.

Tracking/Monitoring Systems

One of the most valuable components of each community's plan was the creation of a collaborative monitoring/tracking system. Generally, illegal dumping incidents were handled on a case-by-case basis by individual departments or agencies within the communities with no cohesive or cooperative prevention or cleanup plan. As a result of this program, the communities developed illegal dumping tracking/monitoring systems shared by all agencies involved in the program (i.e. sheriff's department, health department, roads department). This collaboration will ensure agencies are sharing information consistently and efficiently. Each community also determined one phone number (or hotline) to publicize as the reporting number in their campaign materials.

Linn County developed a particularly impressive tracking system with a web based, password protected application that allows agencies to centrally report and store illegal dumping data. Data can be retrieved and manipulated to show illegal dumping patterns and costs as well as clarify the responsible agency. Clarifying jurisdiction lines is important to ensure prompt cleanup and avoid duplication.

All of the Linn agencies committed to:

- Entering historical records
- Entering labor/cost data
- Track and enter case enforcement and prosecution
- Forward initial report to appropriate agency
- Share on-going costs (annual web host fee, monthly hot line answering service)

Linn County reports that implementing a database reporting and tracking system immediately increased communications between its agencies, resulting in faster response and clean-up.

Program Activity Highlights

- All three communities used radio ads in their programs.
- Boone and Appanoose used newspaper ads or newspaper inserts.
- Boone and Appanoose used point-of-sale posters in local stores.
- Boone used bumper stickers and Linn used windshield decals.
- Linn created a "Good Business" program to encourage local businesses to be involved and help prevent illegal dumping.
- Appanoose used funds to cleanup a problem dump site and then posted "Area Under Surveillance" signs to determine how long/whether it would stay clean.

Boone Highlights

• In Boone County in 2005, the number of appliances collected from dump sites was significantly lower than in previous years.

Linn Highlights

• **Tracking Database:** 360 complaints entered: Active- 69, Complete -291.Entered cleanup/labor costs \$7,628.99. Hours 81.57.

• Hot line calls:

April- 22 (Avg. cost \$4.50/call) May- 37 (Avg. cost \$2.70/call) June -35 (Avg. cost \$2.80/call) July- 41 (Avg. cost \$2.43/call) August- 19 (Avg. cost \$5.20/call) Sept. - 27 (Avg. cost \$3.70/call) October -27 (Avg. cost \$3.70/call) November -33 (Avg. cost \$3/call) December- 8 (Avg. cost \$12.50/call)

Total number of calls: 249

- Answer to hotline question, "Where did you get the hotline number?"
 - 48 Work
 - 4 Radio
 - 3 Flyers/window decals (Good Business Program)
 - 3 Newsletters
 - 5 Newspaper
 - 8 TV

Appanoose Highlights

- In fiscal year 2004, the Appanoose County Health Office investigated 32 complaints of illegal dumping with only one prosecution and conviction. During the pilot program 62 reports were investigated, resulting in ten convictions.
- Sites that have been cleaned and have signs posted are staying clean. During the program 134 sites were cleaned up.
- In fiscal year 04, Appanoose County spent \$9,883.06 cleaning up illegal dump sites. During that year, 326 man hours and 78 equipment hours were used. During the pilot program Appanoose County Secondary Roads focused on problematic sites that weren't previously a priority. During the pilot program, Appanoose County spent \$17,349.32 on the cleanup of illegal dump sites. In that time, 843 man hours and 141 equipment hours were used.
- To consolidate and better track illegal dumping reports the Sheriff's database was enhanced to allow input from all county and public entities reporting dump sites. The Appanoose County Health Office has received fewer illegal dumping reports since establishing and advertising a reporting number.

"Take a Stand" Campaign Survey Results:

| Question | Boone | Appanoose | Linn |
|--|-------|-----------|------|
| Percent of respondents that heard the slogan "Take a Stand For | 11% | 11% | 6% |
| Your Land" in the last year. | | | |
| Percent of respondents that heard a phone number to report | 11.7% | 12% | 3.6% |
| illegal dumping in the last year. | | | |
| Percent of respondents that heard some information about | 30% | 26% | 19% |
| illegal dumping in the past year. | | | |

Each county's plan and results are attached to this report.

Moving Ahead Recommendations for an Expanded Program

The following items are options for expanding an Iowa illegal dumping program. For best results, consider at least a two-year program to allow adequate time for planning and implementation as well as accurate results measurement.

• Community Guide – Offers step-by-step information for communities to create their own illegal dumping prevention program distribution statewide. This piece has been written and designed as part of the initial pilot program. Distribute to county engineers, conservation boards, health departments, ISOSWO members and mayors/city managers through the Iowa League of Cities.

Budget: \$12,000 (these costs are included in the current illegal dumping pilot program budget)

• **Pilot Surveillance Program** – Consider establishing a multi-county pilot surveillance program led and managed by the DNR. Train and equip the team specifically for this program, and include responsibilities in team members' job descriptions. Work with experienced states for training/best practices information before implementing an Iowa program.

Budget: \$75,000 - \$200,000

• Additional Pilot Program – Select another small group of pilot communities to test additional activities/best practices.

Budget: \$150,000 - \$250,000

• Statewide "Take a Stand" Campaign – Roll out a statewide campaign offering online template materials (such as posters, radio ads, etc.) for communities to download and customize. Create a coop program to assist with media placement dollars.

Budget: \$350,000 - \$750,000

Multi-County "Take a Stand" Campaign – Roll out a campaign to a selected cluster of
counties with online template materials (such as posters, radio ads, etc.) for communities
to download and customize. Create a coop program to assist with media placement
dollars.

Budget: \$150,000 - \$250,000

• **Television Ads** – Create and implement a targeted television campaign in a selected Iowa market (i.e. Blackhawk County) to test impact of TV.

Budget: \$50,000 - \$100,000

• Tracking and Monitoring System Education/Training – Develop information/program teaching communities how to create and use a collaborative tracking/monitoring system for illegal dumping reports, investigation and cleanup.

Budget: \$25,000 - \$50,000

• Laws/Ordinance Changes – Create an educational campaign stressing the importance of local ordinances in illegal dumping control and prevention. Those may include licensing haulers, citywide garbage collection and building permit ordinances requiring proof of proper disposal. In the absence of specific ordinances with that requirement, require haulers to provide receipts to individuals after disposal of items at landfill, etc.

Budget: Incorporation into public policy

• Focus on Governmental Entities —Develop a program that focuses on governmental entities working together to combat illegal dumping. Focus on ordinance changes, collaborative tracking/monitoring programs, law enforcement efforts, surveillance, etc. Help government officials understand best practices and elevate their understanding and knowledge of illegal dumping.

Budget: \$20,000 - \$40,000